U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION 2

September 19, 2018

BY ELECTRONIC MAIL

Robert Law, Ph.D.
de maximis, inc.
186 Center Street, Suite 290
Clinton, New Jersey 08809

Re: Re: Lower Passaic River Study Area Draft Remedial Investigation Report – Administrative Settlement Agreement and Order on Consent for Remedial Investigation/Feasibility Study (Agreement) CERCLA Docket No. 02-2007-2009

Dear Dr. Law:

The U.S. Environmental Protection Agency (EPA) reviewed the Cooperating Parties Group's (CPG) Draft Remedial Investigation (RI) Report Sections 1 through 3, dated November 2017 and Section 4, dated December 2017 prepared by Anchor QEA and provided comments on April 27, 2018. The response to EPA's comments and revised figures and tables were received from the CPG on June 11, 2018 and the revised text was received on July 19, 2018. Comments from partner agencies have be incorporated into the enclosed responses. In accordance with Section X, Paragraph 44(d) of the Agreement, EPA has enclosed an evaluation of CPG's revised RI Report with this letter.

Please proceed with revisions to the draft RI Report consistent with the enclosed comment evaluations. If there are any questions or clarifications needed on EPA's enclosed comment evaluations, please contact me to discuss.

Sincerely,

Diane Salkie, Remedial Project Manager
Lower Passaic River Study Area RI/FS

Enclosure



616164

Cc: Zizila, F. (EPA)
Sivak, M. (EPA)
Hyatt, B. (CPG)
Otto, W. (CPG)

**EPA COMMENTS – APRIL 27, 2018**

**Lower Passaic River Study Area Remedial Investigation/Feasibility Study, Remedial Investigation Report Sections 1-4, dated Nov/Dec 2017**

| No | Section | General or Specific | Page No. | Comment | CPG Response (6/11/18) | EPA Evaluation of Response (9/18/18) |
|---|---|---|---|---|---|---|
| 1 | N/A | General | N/A | After "in-prep" documents referenced in the RI Report are provided, EPA reserves the right to reexamine statements made in the text referring to and/or drawing conclusions from such documents. For example, "Table 2-1; Windward 2012a, (in prep)-a" is referenced in Section 2.4.2, last paragraph, Page 10. | Comment acknowledged; no response required. | The response is accepted. |
| 2 | Section 4 | General | N/A | For clarity, the text should define what is meant by surface sediments (i.e., 0-6 inches). | The text has been clarified at the first instance of surface sediment. | The response is accepted. |
| 3 | Section 4 | General | N/A | It is noted that throughout the text, contaminant levels are compared to designated concentrations (sometimes 1 ppt or 100 ppt for dioxin, 0.5 ppm for PCBs, etc.; for example, see second paragraph on page 48). The basis/reference for these comparison levels should be provided. This could be addressed with a simple table that includes the identified COPCs and reference values (background value from Lower 8.3 ROD or reference from 17- mile risk assessment). A discussion of the significance of these reference values should also be provided. | An explanation has been added to the text. | The response is accepted. |
| 4 | Figure 1-1 | Specific | N/A | The legend symbol for "Passaic River Shoreline" appears to be the same symbol as for all water bodies on the figure. Please change the color of this symbol for clarity. | The colors have been changed. | The response is partially accepted. At the scale of the figure, it is not possible to discern shorelines. Please merge the legend markers for "Shorelines" and "Tributaries" to "Other Water Bodies" since the color refers to other water bodies such as the Hackensack and the Hudson. |
| 5 | 1.2.1, second paragraph, last sentence | Specific | 1 | If accurate, please revise this statement to read: "Tides are an important component of circulation and account for one third of the river water volume below Dundee Dam at high tide under average flow conditions (USEPA 2008a)." (emphasis added to identify requested change) | The requested edits have been made. | The response is accepted. |
| 6 | 1.2.1, last paragraph, second sentence | Specific | 2 | Despite the LPR being part of a Superfund site due to the presence of elevated levels of 2,3,7,8-TCDD and other chemical contaminants in the river's media and food chain, this key characteristic is marginally mentioned in the site description (last paragraph), as follows: "Both chemical and non-chemical stressors…. impact biota ….". Instead, the river is characterized in context of "urban stream syndrome", rather than context of a CERCLA discharge. Section 1.2.1 should include chemical releases/discharges and biological characteristics and refer the reader to the relevant sections (such as Section 1.2.2.1 for chemical releases and Section 5.2 for biological characteristics). | The text has been edited. | The response is accepted. |
| 7 | 1.2.1, last paragraph, last sentence | Specific | 2 | Delete this sentence: "Additionally, the channelization and lack of riparian and submerged vegetation creates an unbalanced food web, promoting an increase in invasive species." Replace with this sentence: "Physical modifications to the river associated with urbanization in conjunction with releases of hazardous substances and discharges of pollutants have resulted in reduced ecological function." | The requested edits have been made. | The response is accepted. |
| 8 | 1.2.2, third paragraph, second sentence | Specific | 3 | As currently written, the text states that project studies to date have demonstrated a thorough understanding of "the stability of sediment deposits", in addition to contaminant patterns in sediment, biota, surface water, etc. However, sediment bed stability/erodibility is likely less understood in comparison to contaminant patterns. End existing sentence after the word biota. Add: "Studies to date have allowed an improved understanding of sediment bed stability and erodibility", or similar. | The requested edits have been made. | The response is accepted. |
| 9 | 1.2.2.3, last paragraph | Specific | 6 | Include a sentence at the end of the section to refer the reader to Sections 3 and 4, which provide more details on sediment contamination, erodibility and deposition. | The requested edits have been made. | The response is accepted. |
| 10 | 1.3, footnote 4 | Specific | 6 | Please discuss in the text or in Appendix A the reason for using the estimates rather than the estimates reported by Iannuzzi et al. (2002) and USACE (2010). | The dredging events mentioned in the footnote are more recent than those reported by Iannuzzi et al. (2002) and USACE (2010), and are thus used in the RI. The footnote has been revised to note the same. | The response is accepted. |

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| 11 | Tables 2-1 through 2-5; Appendix E | Specific | N/A | Appendix E is planned to be reissued and the reissue has not yet been made by the CPG. Please ensure each of the data sets listed on Tables 2-1 through 2-5 are included in Appendix E. | Comment acknowledged; no response required. | The response is accepted. |
| 12 | 2.1, footnote 5 | Specific | 8 | Footnote #5 does not explicitly state these concentrations are for 2,3,7,8-TCDD. This clarification should be added. | The requested edits have been made. | The response is accepted. |
| 13 | 2.4.1, first paragraph and footnote 6; Appendix A | Specific | 10 | Please add a brief discussion either in the text or Appendix A of the confidence in the calculated differences between historical (conducted in 1989 or earlier) and more recent bathymetry data, given the method resolution(s). For example, although Appendix A states that uncertainty is not quantifiable, discuss whether the accuracy of datasets from 1989 or earlier provides sufficient data to discern appreciable differences in bed elevation. | Additional discussion of the uncertainties in historical bathymetries has been added to Appendix A. | The response is accepted pending review of the revised Appendix A. |
| 14 | 2.4.1, last paragraph | Specific | 10 | As decided in the June 16, 2016 meeting with Region 2, the CPG will review the side scan sonar (SSS) report and based on the DQOs of the survey, add a paragraph indicating that a SSS survey was conducted, and debris was identified, and then reference the report. No mention of debris was found in the RI Report and debris should be identified in the RI Report. | The requested edits have been made. | The response is accepted. |
| 15 | 3, first paragraph, fourth sentence | Specific | 17 | Please revise this statement to read: ““The river has a limited and impaired habitat for fish and shore birds as a result of centuries of industrial activities and development (e.g., contamination, channelization, shoreline hardening, dredging, and dam construction).” (emphasis added to identify requested change) | The requested edits have been made. | The response is accepted. |
| 16 | 3, first paragraph | Specific | 17 | As noted in Section 1.2.1, “Many municipalities and counties along the LPR have published master plans that call for the expansion and improvement of parks and open space along the river, which, if implemented, will lead to greater access to the river…” Please revise the text in this section to note the planned expansion and improvement of parks and open space along the river, and that increased access may result in increased exposure to human receptors. In addition, the description of the current uses of the upper portion of the LPR should also include uses not only limited to the eastern shore (such as crewing activities). | The text has been edited. | The response is partially accepted. Please further revise the text to note that increased access may result in increased exposure to human receptors. |
| 17 | 3, second paragraph, first sentence | Specific | 17 | Revise this statement to read: “Contamination, SWO/CSO discharges, urban runoff, and natural sources of organic matter influence water and sediment quality and affect ecosystem health.” (emphasis added to identify requested change) | The requested edits have been made. | The response is accepted. |
| 18 | 3, second paragraph, fifth sentence | Specific | 17 | Revise this statement to read: “The ecology of fish and invertebrate communities is also impacted by contamination, high turbidity, brief periods of depressed DO, nutrient inputs, and variations in sediment grain size.” (emphasis added to identify requested change) | The requested edits have been made. | The response is accepted. |
| 19 | 3, third paragraph, first sentence | Specific | 17 | Revise this statement to read: “This section presents the physical, hydrogeological, hydrological, and sediment characteristics pertinent to the fate and transport of sediments and contaminants so as to provide a basis for understanding contamination patterns and potential recovery.” (emphasis added to identify requested change) | The requested edits have been made. | The response is accepted. |
| 20 | 3.4, first sentence | Specific | 20 | This sentence contains the first reference to “fine-grained sediment” in the main text of the document. Please provide a definition of “fine-grained” as it is used in the RI. | The text has been edited. | The response is accepted. |
| 21 | 3.4.2 | Specific | N/A | Potential future climate change impacts on sediment dynamics should be discussed. Potential changes include more frequent high flow events, sea level rise and increased frequency of flooding. | Additional discussion has been added to Section 3.4.2. | The response is partially accepted. Despite uncertainties with the degree and timeframe for climate-related impacts to this system, future increases in frequency and magnitude of high flow events are expected (NOAA 2017,) and therefore, in addition to other climate change impacts already included in this section (flooding, storm surge, etc.) the impacts must also be described in terms of the potential greater erosional forces on the sediment bed brought on by increased frequency of greater water flow volumes. For a Superfund remedial project characterized with increasing sediment contaminant concentrations with |

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| | | | | | | depth, a greater focus on current and future anticipated erosional characteristics is needed. Add the following statement, or similar: "The increased frequency and volume of precipitation events within the Lower Passaic River watershed may also promote greater erosion in predominantly erosional areas and cause sediment to erode to a greater extent in other areas currently considered either less erosional or depositional."<br><br>The following report should be consulted for this purpose: NOAA Technical Report NOS CO-OPS 083, *Global and Regional Sea Level Rise Scenarios for the United States*, NOAA, Jan. 2017, with input from US Department of Commerce, US Geologic Society, USEPA and Rutgers University. |
| 22 | 3.4.2, first partial paragraph and Figures 3-8 and 3-9 | Specific | 23 | Please elaborate in the text how Figures 3-8 and 3-9 "confirm that the water column solids concentrations are dominated by the easily erodible fluff layer." | The text has been edited. | The response is accepted. |
| 23 | 3.4.2, last paragraph | Specific | 23 | The text appears to emphasize mobile sediments as originating from above Dundee Dam or from Newark Bay. The in-river sediments between Dundee Dam and Newark Bay are not identified despite their important role regarding the river's contaminant distribution and transport. The text should be revised as follows: "...induce a convergence of fine sediment transport around the ETM for sediments originating from within the river, above Dundee Dam, Newark Bay, and tributaries." (emphasis added to identify requested change) | The requested edits have been made. | The response is accepted. |
| 24 | 3.4.2, item number 2, last sentence | Specific | 24 | If erosion is limited to only the fluff layer under moderate flow conditions, then the proof of this fluff layer response should be discussed. Documentation with citations or model results should be included. | The text has been edited. Note that citations on fluff layer characteristics/behavior are provided in an earlier paragraph, as well as in Appendix M along with additional analysis. | The response is accepted. |
| 25 | 3.4.2, item number 3, last sentence | Specific | 24 | Revise the statement to read as follows, for clarity: "The system, as a whole, exports sediments during this regime, with solids potentially originating from above Dundee Dam and from tributaries, and from in-river sediment bed erosion extending below the fluff layer into more highly contaminated sediment." (emphasis added to identify requested change) | The text has been edited. | The response is accepted. |
| 26 | 3.4.2, last paragraph | Specific | 24 | The text requires clarification on the current state of river sediment mobility relative to the past. The text should more clearly state that, currently, the river is likely in a state of balance, or quasi-equilibrium (8 Mile ROD, 2016), between sedimentation and erosion. For this reason, meaningful reduction in sediment bed contaminant concentrations have not been observed in the past 17 years. In addition, because of reduced infilling capacity, scouring-favorable conditions may be more frequent now than in the past. These items are not clearly stated, but are important conditions for remedial planning purposes and should be added to the text. This section should be revised to include a discussion of these factors. | The text has been edited. | The response is accepted. |

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| 27 | Section 4 | Specific | N/A | Additional reach-specific data summary tables to support Section 4 are needed and should be modeled after Tables 1 and 2 of the OU2 ROD. Although the list of contaminants is expected to be similar to OU2, some adjustments may be warranted. This information adds important perspective on overall extent of contamination in the sediments. This is particularly relevant for the upper 9 miles of the river where the depth of the channel gradually decreases and accumulated silt layers tend to become thinner moving upstream in both the channel and outside of the channel. These tables can also include the reference values requested in Comment #3 (above). | Summary tables have been developed for each reach. | The response is accepted. |
| 28 | Figure 4.1-1 | Specific | N/A | Please add a note on the figure describing what the "^" symbol represents between the two cross-sectional area plots. | The requested note has been added. | The response is accepted. |
| 29 | 4.1, second paragraph and relevant 4.1 figures | Specific | 11 | "That said, definitive transition points do not exist, and the reach boundaries used herein were chosen considering factors such as geomorphology, changes in river orientation, locations of bridges, and tributary confluences."<br><br>This statement requires either modification or additional clarification to identify the RM 8.3 demarcation in the river and why. The reasons for RM 8.3 as a boundary between OU2 and OU4 may differ from the primary factors used for selecting the 10 designated reaches but are considered relevant. At a minimum, figures supporting Section 4.1 should be amended, as deemed necessary (e.g., Figure 4.1-1, Figure 4.1-4, Figure 4.1-8 series) | As discussed on May 16, 2018, the OU2/OU3 boundary has been included in figures showing this region. | A statement has been added in two locations (section 4.2 and subsection 4.2.7). Revise the statement as follows: "The ***upstream boundary of*** OU2 is located within this reach at RM 8.0 (USACE RM 8.3)" ***(emphasis added to identify requested change).*** In addition, the technical basis for the demarcation at RM 8.3 is not presented. The significance of this boundary is based on sediment bed characteristics and this should be described in Section 4.1 with a specific reference to Figure 4.1 –4, which illustrates these characteristics.<br><br>Revise the added description in the notes of Figure 4.1-1 as follows: "Dashed orange line denotes ***upstream*** boundary ***of OU2***." ***(emphasis added to identify requested change).***<br><br>On Figure 4.2-1, the figures in the 4.2.7 series, and Figure 4.2.8-4a, the label "OU2/OU3 Boundary" should be changed to "OU2 Upstream Boundary" |
| 30 | Section 4, footnote 2 | Specific | 11 | Please verify and revise the footnote to indicate the correct appendices being referenced (i.e. Appendix I and K). | The requested edits have been made. | The response is accepted. |
| 31 | 4.1, fourth sub- bullet, second sentence | Specific | 12 | "Year-over-year differentials are used to classify the sediment bed into four bathymetry categories: Erosional from 2007 to 2012, Erosion and Deposition, Depositional from 2007 to 2012, and No Change/Temporarily Depositional."<br>Please either reclassify the last grouping as "No Change/Temporarily Depositional or Erosional", or explain why "temporarily erosional" (e.g., regions that experienced measured erosion of less than 6 inches) are not be included in this category. | The requested edits have been made. | The response is accepted. |
| 32 | Figure 4.1-3 | Specific | N/A | Figures like Figure 4.1-3 are very informative and are useful in presenting the RI information. However, for clarity, please add a footnote to such figures that gives the uncertainty (e.g., +/- 0.5 ft) of the bathymetric survey information being plotted. Please also include a similar note on any figures where bathymetry data are presented. | The requested edits have been made. | The response is accepted. |
| 33 | 4.1, first full paragraph, first sentence | Specific | 14 | While the text does note that the pattern of highest concentrations in fine sediments holds for "many", but not all contaminants, please revise the text to specifically note that this relationship does not always hold for LMW and HMW PAHs (and others, if appropriate). | A footnote has been added here stating the same. | The response is accepted. |
| 34 | 4.1, last paragraph, fourth sentence | Specific | 14 | Please revise the text to read: "These declines are less pronounced than those observed for 2,3,7,8-TCDD, indicating PAH levels in Newark Bay are likely influenced by downstream sources." (emphasis added to identify requested change) | The requested edits have been made. | The response is accepted. |

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| 35 | 4.1, last paragraph, sixth sentence | Specific | 15 | "Thus, attempting to meet this criterion can introduce a bias toward fine sediments as the field crew makes multiple attempts to collect an acceptable core."<br>The implications of this bias on the identification of pockets of fine sediment and understanding of the distribution of fine grained sediments and sediment contamination should be discussed in this section. | The text has been edited. | The response is accepted. |
| 36 | Figure 4.2-1 | Specific | N/A | Please add a note on the figure that SSS is not available from approximately RM 16 to Dundee Dam. | The requested edits have been made. | The response is accepted. |
| 37 | Figure 4.2.2-3 (and other figures with silt percentages) | Specific | N/A | The significance of the 20% silt value should be described in the text of Section 4.2.2 to provide context to this percentage used in the figures. | The 20% fine sediment content was decided based on the observation that samples with more than 20% fine sediments contained higher 2,3,7,8-TCDD concentrations. A footnote has been added here stating the same, and referencing the corresponding figure (Figure 3-7 of Appendix J). | The response is accepted. |
| 38 | 4.2.1, footnote 8 | Specific | 17 | Please verify and revise the footnote to indicate the correct appendix being referenced (likely Appendix L). | The requested edits have been made. | The response is accepted. |
| 39 | Figure 4.2.2-6a | Specific | N/A | Please add a category or note to the "bathymetry change category" legend to denote that gray areas do not have sufficient data for bathymetry differential comparison. Please also make such notes on any figures where bathymetric data are missing or unavailable. | The requested edits have been made. | The response is accepted. |
| 40 | Figure 4.2.2-11a (and other figures with overlapping core sampling results) | Specific | N/A | The top segments of CLRC 087 and LPRT16A are overlain on each other on Figure 4.2.2- 11a, making it difficult to see both concentrations. Please revise this figure (and any other such instance of overlain samples) so that both sample concentrations can be clearly seen. There are also instances where one sample location name covers the concentration results from a nearby sample (e.g., Figure 4.2.2-12c). Please arrange all sample location names so that all concentration data can be clearly seen (including on other figures). | Figure 4.2.2-11 and other single-panel stacked core maps have been revised as requested in the comment. As discussed on the May 16, 2018 call, the other 2-D figures have been revised to show the higher concentrations over the lower concentrations for co-located samples. It was not possible to make similar revisions to the 3-D maps. | The response is accepted. |
| 41 | 4.2.2, second full paragraph, first sentence | Specific | 22 | Please provide some statistical measure of correlation on any figures similar to 4.2.2-13a through 4.2.2-13e, and also please provide associated discussion of these statistical measures in the text to support the presence, absence, and degree of correlation between measures. | As discussed on the May 16, 2018 call, the figures have been revised to show the Spearman's Rank Correlation Coefficient. | The response is accepted. |
| 42 | Figure 4.2.3-3 set (and similar SSS results figures) | Specific | N/A | Please provide a note (or expand the existing note) that explains the difference between the legend categories of "Sand and Silt" and "Sand and Fines", as both appear to utilize the same shade of green in the legend. | The figures have been revised. | The response is accepted. |
| 43 | 4.2.3, first partial paragraph | Specific | 25 | Please either provide similar 3D relief maps for the reaches above this one, or provide a note in the text stating why such maps are not available. | A footnote has been added here to address this comment. | The response is accepted. |

**EPA COMMENTS – APRIL 27, 2018**

**Lower Passaic River Study Area Remedial Investigation/Feasibility Study, Remedial Investigation Report Sections 1-4, dated Nov/Dec 2017**

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| 44 | 4.2.3, first full paragraph, second sentence | Specific | 25 | Please revise the text in the section to note that well defined Cs-137 peaks are not present in many of the cores, and the implication for interpreting depositional histories using these types of activity profiles. | Interpretation of the depositional histories in these locations is not possible, given the lack of well-defined peaks. The same has been acknowledged in a new footnote. | The response is accepted. |
| 45 | 4.2.3, second full paragraph, first sentence | Specific | 25 | "Cores collected in this reach have contamination at depth, consistent with the sediment accumulation noted above." A correction is needed to this opening statement which appears to inadvertently indicate that contamination is only found at depth. Detailed discussion of subsurface and surface sediment contaminant follows in the paragraph. Although contaminant concentrations tend to increase with depth in the sediment bed, river conditions have maintained elevated contaminant concentrations in surface sediments. The first sentence should be revised to "In addition to surface contamination, the cores collected…". | The requested edits have been made. | The response is accepted. |
| 46 | 4.2.3, second full paragraph | Specific | 25 | As an overarching comment, please provide figures similar to Figure 4.2.3-9 for total DDx, mercury, HMW PAH, and LMW PAH, or provide rationale in the text for why such figures are not provided. As a general note for document completeness, figure sets should present information for all the chemicals of concern, and not just subsets of chemicals, unless a note explaining the rationale for not having such figures is provided in the text. | The requested figures have been included in Appendix Z. | This response is accepted. As a note, please revise "Appendix Z" references in the text to reference the proper Appendix should the Appendix names change in the future. |
| 47 | 4.2.4, second full paragraph, second sentence | Specific | 31 | Figure 4.2.4-2c shows an area of rock and coarse gravel identified by SSS near the Passaic's confluence with Third River. However, Figure 4.2.4-4 shows this same confluence area as having a relatively low maximum shear stress. Please revise the text to note this apparent discrepancy, and provide rationale for the discrepancy, if known. | The requested edits have been made. | The response is accepted. However, the response notes that the resolution of the hydrodynamic model is not sufficient to predict elevated shear stress at this location. The report should discuss the implications of this somewhere (e.g. Section 7 or Appendix L). |
| 48 | 4.2.4, last full paragraph, second sentence | Specific | 32 | Mercury concentrations at 13B-0555 should also be discussed in the text in addition to the other COPCs due to the elevated levels of mercury detected throughout the sediment core profile. | The requested edits have been made. | The response is accepted. |
| 49 | 4.2.4, first full paragraph | Specific | 35 | Please revise the text to discuss the rationale for not collecting samples in the main channel within this reach and potential impacts on the understanding of contaminant distributions in this area, if any. | The requested edits have been made. | The response is accepted. |
| 50 | 4.2.4, first paragraph, second sentence | Specific | 37 | "The remaining concentrations in this region are not elevated with respect to the parts of the reach upstream of the Lyndhurst Draw, a likely result of the diminished influence of the previously mentioned upstream source (noted in Section 4.2.1), and the differing PAH sorption properties."Section 4.2.1 has insufficient details on this upstream source. Please revise the text to reference the appropriate section in the RI where sources and loading histories have been discussed or provide some potential upstream sources that would help provide a basis for these statements. | There is insufficient information about an upstream PAH source; a note has been added to Section 4.1 stating the same. | The response is accepted. |
| 51 | Figure 4.2.5-17 set | Specific | N/A | The legend item descriptions are switched between the "Data Distributions" legend and the "Example Areas Shown on Probability Distribution to the Left" legend. Please fix. | The legends have been clarified. | The response is accepted. |
| 52 | 4.2.5, second full paragraph; Figures 4.2.5-19 | Specific | 43 | Please add a note on the 4.2.5-19 series of figures, and any other figures presenting data from the RM 10.9 TCRA area, stating that the TCRA was substantially completed in 2014. | The requested edits have been made. | The response is not accepted. The note does not appear to have been added to the 4.2.5-19 series of figures. |
| 53 | 4.2.6, third paragraph, third sentence | Specific | 51 | The text incorrectly references Figures 4.2.6-14d and 4.2.6-14e. The correlation figures are 4.2.6-15; the text should be corrected. | The requested edits have been made. | The response is accepted. |

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| 54 | 4.2.7 | Specific | N/A | This reach contains the boundary between OU2 and OU4 at RM 8.3 This important demarcation in the river, from a remedial investigation and feasibility study perspective, should be identified and reflected in the analyses and supporting figures for this section as appropriate. RM 8.3 was selected as an upstream boundary of OU2 for specific reasons related to the physical and chemical characteristics of this area relative to the riverbed moving upstream (April 2016 ROD). | As discussed on May 16, 2018, the OU2/OU3 boundary has been included in figures showing this region. | As noted in the evaluation of response to Comment #29, the added statement should be revised as follows: "The ***upstream boundary of*** OU2 is located within this reach at RM 8.0 (USACE RM 8.3)" ***(emphasis added to identify requested change).*** Also, the technical basis for the OU2 upstream boundary should be discussed. |
| 55 | Sections 4.2.9 and 4.2.10 | Specific | N/A | For both sections, the total acreage of each reach needs to be added to the initial portion of section. | The requested edits have been made. | The response is accepted. |
| 56 | Figure 4.2.8-9e, Figure 4.2.9-9d,e,f, Figure 4.2.10-9d,e,f | Specific | N/A | The contaminant concentrations for both surface and subsurface appear to be identical on these figures. Please confirm that the correct concentrations are presented for surface and subsurface samples on these figures. The complete list of figures with identical surface and subsurface contaminant concentrations is as follows:<br>• 4.2.2-8c to 4.2.2-8d<br>• 4.2.3-9c 4.2.3-9d<br>• 4.2.4-9c 4.2.4-9d<br>• 4.2.5-11b to 4.2.5-11<br>• 4.2.6-8c to 4.2.6-8d<br>• 4.2.7-11c to 4.2.7-11d<br>• 4.2.8-9e to 4.2.8-9h<br>• 4.2.9-9d to 4.2.9-9f<br>• 4.2.10-9d to 4.2.10-9 | The figures have been corrected. | The response is accepted. |
| **New Comments on the Revised Text (Dated July 19, 2018) and Associated Figures/Tables (Dated June 11, 2018)** | | | | | | |
| 57 | 1.2.2.1, first bullet | Specific | 4 | The text states "OU-2: The second operable unit addressed the contaminated sediment found in the lower 8.3 miles of the LPR…" However, OU-2 has not been completed. Please change the text to be present/future tense and provide more detail by noting when the OU2 ROD was issued (March 2016). | N/A | N/A |
| 58 | 1.2.2.1, third and fourth entries of bulleted list | Specific | 5 | The descriptions for OU-3 and OU-4 have been switched. OU-3 addresses the Newark Bay Study Area and OU-4 addresses the entire 17 miles of the LPRSA (see the Evaluation of Response on Comment #29). Please change the text accordingly. Additionally, if other areas of the report use OU3 instead of OU4, the correct OU number should be used. | N/A | N/A |
| 59 | N/A | Specific | N/A | Figure 3-11 (Number of High Flow Events with Peak Daily Flow > 10,000 cfs at Little Falls, NJ) has been removed from the revised submittal. Please provide an explanation as to why this was done. | N/A | N/A |
| 60 | 3.4.2, third paragraph | Specific | 22 | Although referenced to other sections (App. M and Section 6), a short overview of site-specific fluff layer characteristics as determined from site data should be provided in this section (thickness, extent across river bed, variations among different geomorphic areas, if known, etc.). | N/A | N/A |

N/A – not applicable